## ABSTRACT

A method for providing security in password-based access to computer networks, the network including a server and a remote user, includes: signing a phrase by a security chip of the server using an encryption key; associating the signed phrase with the remote user; signing the phrase with an encryption key obtained by the security chip when a request for access to the computer network is received from the remote user; comparing the phrase signed with the obtained encryption key with the signed phrase associated with the remote user; and granting access to the remote user if the phrase signed with the obtained encryption key is the same as the stored signed phrase associated with the remote user. The use of the encryption key protects against "dictionary attacks". Use of the security chip protects against offline attacks. These provide greater security for the computer network.